murmur heard at the base of the heart? You may remember that the systolic murmur heard with maximum intensity in the vicinity of the apex almost disappeared at a point two and a quarter inches to the right of the apex; but that over the sternum in the tricuspid area a feeble systolic murmur could be heard which became more distinct farther up the sternum, reached a maximum intensity, with very limited distribution, in the second left interspace close to the sternum, and was almost equally well heard at a corresponding point in the first and second right interspaces. I believe that this bruit occurs in both auricles as a result of an imperfect septum and mitral incompetence. It must be remembered that auricular diastole commences at the same time as ventricular systole, consequently the regurgitant mitral stream will in the left auricle encounter blood coming from the pulmonary veins and open foramen. The meeting of three streams coming from different directions can hardly fail to generate fluid veins which will be communicated to the contents of the right auricle and to the auricular walls; the points of maximum intensity of this murmur correspond to the appendix of the left auricle and upper part of the right auricle. Assuredly it cannot be due to pulmonary stenosis because the other physical signs and the dyspnea on exertion, which is invariably associated with that lesion, are entirely absent; whilst the limited area of its distribution and the absence of its propagation into vessels of the neck would be opposed to the idea of its being aortic in origin.

It is not possible to be certain whether the septal defect is in the auricle or ventricle but there appear to be several points in the case that indicate the existence of a patent foramen ovale in addition to the fact that the patient was a "blue" baby.

It is generally admitted that a defect in the inter-auricular septum is more common but much less liable to produce symptoms than an opening between the ventricles, and it is only in keeping with these facts that we should find a very large majority of the recorded cases of defective septum, in which the patient lived to old age and presented few if any indications of circulatory disturbance, demonstrated by autopsy to be of the auricular variety. The frequency with which this lesion is found may be best indicated by the following statistics. "Among 711 adults Zahn found the foramen ovale open 139 times, and among Adami's records of 1374 autopsies at the Royal Victoria Hospital, the foramen was patent 199 times (14.5 per cent.)." (Osler's Modern Medicine, Vol. iv, 349.)

The ability of this patient to undergo severe physical exertion without suffering any inconvenience would suggest that the trouble is in the auricle rather than in the ventricle. A defective inter-ventricular septum produces very much the same results as mitral incompetence so long as the tricuspid valves remain competent, and as it does not obstruct the circulation in the lungs the patient may not suffer any inconvenience when at rest, although he generally becomes dyspneic on exertion. It is probable, however, that this patient suffers from mitral incompetence and, if in addition to this an inter-ventricular opening exists, the combined strain of the two conditions upon the right ventricle, together with the obstruction to the circulation through the lungs would make him incapable of undertaking the work which he now performs with ease. It is interesting to note in this connection that my interne, Doctor Prince, called my attention to the fact that the patient is less cyanotic when up and assisting in the ward work than when lying at rest in bed, and this is just what we have reason to expect in a case of open auricular septum complicated by mitral incompetence because when the heart contracts more vigorously under the stimulation of exercise, more *arterial* blood will be driven back through the opening between the auricles so that the blood which enters the right ventricle is already partially oxygenated. In short, as a result of this double lesion some of the blood passes through the lungs twice before entering the systemic circulation. Possibly Senac refers to this class of cases in the observation that "when the foramen ovale remains permanently patent it allows of prolonged diving, and even of suffocation up to a certain point." (Gibson, Diseases of the Heart and Aorta, 302.) Lastly, the systolic murmur at the base, in the absence of signs of injury to the pulmonic or aortic valves, suggests auricular rather than ventricular disturbance, if we are correct in believing it to be indicative of mitral incompetence.

PROSPECTS AND RETROSPECTS.*

By A. BARKAN, M. D., San Francisco.

This sketch of forty years' experience as a teacher and a specialist for eye, ear, nose and throat in California was prompted by a friend, who asked to have it put before the medical profession of Vienna with whom I studied and worked forty years ago but from whose ways and works I have diverged under the influence of different conditions and obvious necessities. Although a specialist, I cannot avoid including general medicine in the field of my consideration, but I shall avoid figures and names—I shall present only those general ideas that my life-work as a teacher and a physician have brought home to me, with such facts (outside of my own experiences) as my trips and visits to the medical centers of the East have enabled me to gather through personal observation.

When I arrived in San Francisco forty years ago fresh from the school of von Arlt and Jäger the entrance requirements of schools of medicine amounted to nothing worth mentioning. Lectures and clinics were prescribed for seven months of two consecutive years, a preliminary course of three months was not obligatory,—at least not in San Francisco. All subjects were taught simultaneously from the very beginning of the first year. Lectures on anatomy and physiology went on parallel with

* Translated from an essay in the Wiener Klinische Wochenschrift, No. 27, 1912.

each other and with the clinics for surgery and for internal medicine. The specialties were taught in the second year. If I remember rightly the greater part of the lectures and courses of the second year were simply repetitions of those of the first. Teachers were also examiners and examination was followed by immediate practice. This, at that time and for a considerable time afterwards, constituted the training of a practitioner.

The old custom of apprenticeship, originally English, was frequently followed. The student had a preceptor to whom he gave his services as office-boy, dispenser, coachman, and general utility man in return for such teaching as his master could give. Most, perhaps all medical schools owed their origin to a corporation of physicians bent on their own medical improvement. These petitioned the state legislature for the right to incorporate as a medical school, a petition which was a mere matter of form. In this way the easily established school acquired the right to grant diplomas. It was subject to no other criticism than public opinion, the judgment of outside members of the profession, often its bitter opponents, and its own conscience. It was under no official control; neither city nor state cared about the efficiency of its teaching or the value of its diplomas; they gave it neither financial aid, moral support, or legal supervision. The running expenses were met by the students' fees. Almost all the teachers, certainly the clinical ones, gave their services gratis; any surplus in the treasury accrued to them as dividends. Doubtless some of the teachers had this dividend in view when they gave their services, but this was certainly rare. Cooper Medical College had not paid a dividend for the last thirty years, and even before this time the dividends were very small. Paid professorships were gradually established for the theoretical branches, hospitals were built and furnished, clinics were scientifically equipped. It was a pleasure to see the results of one's own efforts turned little by little toward the improvement of teaching facilities; dollars could not repay the satisfaction felt at seeing these old pioneer teachers give their services so cordially and enthusiastically. California was at the time of which I write scarcely twenty years old, everything crude and primitive.

In spite of the ridiculously brief course of training and the apparently absurd way of teaching everything at once (but perhaps just *because* of this way of teaching) the students of those days knew how to accumulate an astonishing quantity of important knowledge, of "medical facts"; and not a few thus trained under the old regime qualified later as competent physicians and surgeons.

Ophthalmology and otology were taught and practiced together. Clinical instruction in these branches was perforce preceded by a short introductory course on the anatomy and physiology of the organs of special sense with demonstrations. The students learned to use the simple lens, learned lateral illumination and the use of the ophthalmoscope; at the end of the second year the talented ones were able to recognize the simpler ophthalmoscopic findings. Clinical material was sufficient for the training of the general practitioner, particularly of the country physician and the mining-camp surgeon, the more important diseases of the outer eye and of the middle ear being sufficiently represented. Interest in the field increased rapidly as work progressed. A rapid, although perhaps merely temporary cure of a case of conjunctivitis or keratitis eczematosa (or scrofulosa, as it was still termed by v. Arlt), a good cosmetic result after an operation for squint, a certain assurance in diagnosis and prognosis, and a careful and methodical examination, then as now characteristic of the Vienna school, never failed to attract and to interest the students. Senile cataract and glaucoma were rare in those days. The lust for gold had brought only active and sturdy young men to California. Luetic diseases, trachoma (mostly imported by the Chinese coolies) and traumatic affections of the eye-ball on the other hand abounded. Frequent altercations over "mine and thine," often accentuated by a prodigal use of whisky, brought fists, knives and revolvers into ready play,—altercations whose objects varied from a horse to a gold mine or a woman.

My students were diligent young men who had left all kinds of occupations to study medicine:—no, scarcely *study,* rather to listen at the portals of medicine. They soon noticed that the correct recognition and the proper treatment of many diseases of the eye and ear would materially aid them in their practice in remote country and mining districts. They were industrious and quite unconsciously caught, and became imbued with my own readiness to help the sick, particularly the indigent blind. Crowded close around me, as I myself had crowded with my fellow-students close round v. Arlt, I made them see and taught them to observe; anatomical and physiological data were interwoven as much as possible with the clinical instruction, and the results attained were quite satisfactory.

The study of ophthalmology in the larger Eastern schools, which at this time counted several competent ophthalmologists among their faculties, was not very different. Not nearly the stress was laid on ophthalmology that was laid on gynecology, a specialty for which the American has ever shown particular fitness. The student learned a little of ophthalmology and otology at every medical school, but very few specialists were trained until Knapp, whose activities fostered, guided and modeled American ophthalmology, appeared in the field about 1868-69. He established his "Ophthalmic and Aural Institute," trained a series of competent assistants and founded the *"Archives of Ophthalmology"* (Knapp's Archives). His untiring industry, his work, eminent both practically and scientifically, his incentive, often his corrective criticism, created a school, and elevated as with a single impulse the whole status of American ophthalmology.

At this time a Renaissance in medical education took place in the East, and California too, termed by the water-color painter Hildebrand the cloaca for European and Asiatic refuse, began to look toward its own purification. It was surely necessary, for there were no restrictions upon practice

and a large percentage of medical practitioners was unqualified. The leading exponent of that fashionable form of the healing art styled Homeopathy, who enjoyed the practice of the most elegant circles, particularly of American ones, was, I was told, a former German horseshoer—and let it be said, an honest fellow with great desire for improvement and the possessor of an excellent medical library. The busiest oculist was a quack, one of many charlatans, but he too had picked up some little knowledge as orderly in a hospital. The "King of Pain" and I made our entry into the city of my dreams on the same day. In an open chariot, drawn by four white horses, he drove about, a tall, pallid fellow, with a curly peruke and most solemn aspect; like a king of graciousness rather than of pain he dealt out his all-healing elixir at a dollar a bottle. However, eagerness to explore the newly discovered land of gold and love of adventure had lured not only quacks but a considerable number of well-trained and gifted physicians both from the Eastern states and from England and Germany. Many of these when they first arrived worked with pick and shovel, or washed gold from the little streams of the Sierra Nevada. They won and lost fortunes and finally threw themselves into the sustaining arms of the practice of medicine. One and another among them was competent as an oculist, and practised ophthalmology along with general medicine. The considerable legacy left the Society of German Natural Scientists and Physicians (Gesellschaft der Deutschen Naturforscher and Aerzte) was the bequest of one of these pioneer colleagues, Dr. Trenkel, a son of the Schwarzwald, excellent as man and physician alike, and ever ready with true fraternal cordiality to smooth the path of his younger confreres. So we had a motley medley of competent and decent, of unscrupulous and ignorant doctors and of those who called themselves such; of oculists, of pink-eye-specialists, and salve-spreaders.

Gradually, very gradually, in the early '70's the process of purification set in, and the medical field of battle was little by little cleansed of its hyenas. Public conscience awoke. A medical course of three years was made obligatory, the state-board examinations were made more rigid and a proper division of the course of study began to take place. About this time the need of post-graduate courses began to make itself felt in all branches of medicine. Colleges were founded for this purpose, particularly in the medical centres of the East, and equipped with teachers, many of them well-trained for their work. At this time, about 20 years ago, specializing began in all branches of medicine. Physicians and surgeons trained hurriedly and superficially in accordance with the slender demands made of them began to flood the country in hordes as specialists of all kinds—among them oculists and aurists. It was fortunately the more mediocre part of the profession that engaged in this hurried and short-sighted career, for at this period the number of academically-trained and well-prepared young Americans that one met in the courses and laboratories of Europe, and particularly of the smaller German universities, began to increase. My alma mater Vienna, especially, offered courses adapted to American needs and attracted a great number of the younger American physicians.

And so I, too, shared the lot of those teachers whose pleasure it is to see former assistants grow to be successful rivals—the more so as almost all of my assistants devoted years of diligent work under the trusted masters of my old Fatherland to this end.

The competition that comes from the machine-made specialist of our post-graduate courses is less gratifying. It is thanks to them that there is no little town of a thousand inhabitants that does not boast of one or more oculists and aurists; every country jeweler is an optician or was one until the recent regulation of the optical trade by optometric societies.

And now a word or two on a subject very near to me. What is the ultimate reason of the faultiness hitherto so often evident in medicinal education?—an explanation that applies frequently at least to our Californian conditions. The canker lies in our free grammar schools, so often lauded by American voices, so often found wanting by others. Eight years are spent in acquiring a very mediocre elementary training. The teaching staff of most of our schools consists of underpaid girls and women. "The most precious asset of a nation, the education of its children, is put into the hands of women" (I quote Professor Münsterberg of Harvard in spirit if not in the letter) "because their services cost town and state less than the services of male teachers." The result is easy to foresee; machine-work and superficiality are rife, the plastic mind of the child is rolled out thin and squeezed flat.

Under guidance of competent male pedagogues the material which is now spread over eight years could easily be assimilated in four and the remaining four precious years could be devoted to more advanced, maturer work. But not alone is the school to blame. The root of the evil extends to the family. Girls as well as boys, accustomed to independence from early childhood demand recognition of their individuality from their parents. The young citizen in knickerbockers, the schoolgirl in short skirts, who attains her majority at 18, want to be taken seriously. Family discipline is lax, respect for parents and teachers often wanting; study and obedience are regarded as uncongenial things by the child. The principal task of the school, that of teaching the child to think, is scarcely met. At a time when a thorough general foundation should be laid by pedagogically-trained, earnest men, most western grammar schools show a lamentable deficit. The next four years of high school are much more useful. They are approximately comparable to the second, and as regards physics and mathematics to the first classes of the German "Gymnasium." The teachers are mostly men and the results correspondingly good.

With the new entrance requirement of a preparatory college course and the extension of the medical course to four years the first-year American medical student is at least the equal of his German or Austrian colleague in his knowledge of the natural

sciences, lagging behind him a little only in the classics. It is unfortunate that the specialties do not take the place in this new curriculum that their importance demands. Instead of the two semesters of ophthalmoscopy and operative surgery of the eye required in Germany we have the system by which groups of 6-8 students have not more than 25 hours section-work with perhaps one additional lecture a week for but one semester. It is clear that not much can be accomplished in so short a time. This must soon change. The conviction must soon prevail in leading university circles that much more time and more careful methods are necessary in order to do justice to the two important specialties and to arm the general practitioner with the knowledge he needs in order to successfully cope with the prevalence of preventable blindness and the loss of life through neglected disease of the middle ear. The change is near at hand; the fifth medical year is rapidly approaching and with it more time for study and the separation of the two specialties. With the ubiquitous growth of laboratories a more thorough specialistic training in physiology and pathological anatomy will be developed, accompanied by more careful inquiry into each individual case and a closer connection with general medicine. The man intending to engage in one of these specialties should spend two or three years after graduation as assistant in physiology or pathology and then, and only then, work steadily under the strict but encouraging guidance of a master-teacher. Cut off four years from the grammar school and a young practitioner can, if he work steadily from the beginning, acquire a full training before he reaches his thirtieth year.

Last but not least: May our younger colleagues not lack ideals. What more beautiful or more satisfactory life-work than that of the eye or ear surgeon—the conserver and guardian of those organs of special sense on which our happiness and usefulness depend? May the more thorough training in these specialties at home and abroad accrue to the weal of suffering humanity.

Carlsbad, May, 1912.

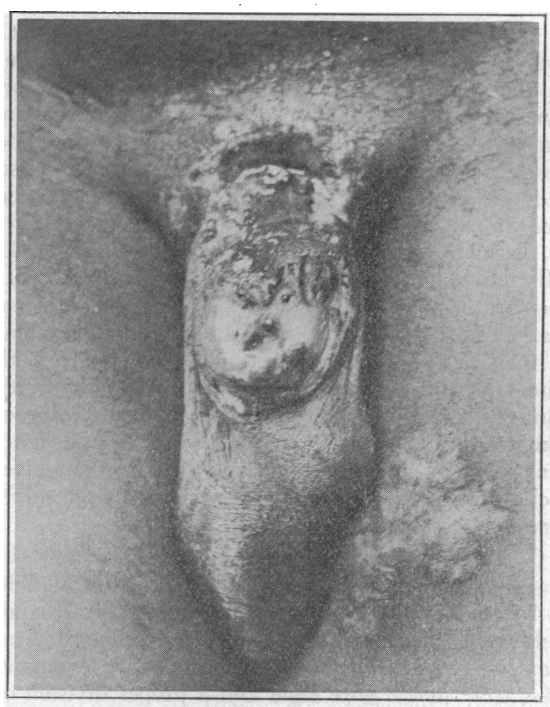
GRANULOMA INGUINALE TROPICUM.*

By D. FRIEDLANDER, M. D., San Francisco.

The only excuse that I have to offer for the presentation of this paper, since it carries nothing original with it, is the fact that this disease is so infrequent in the temperate zone. In view of the constantly increasing number of tropical affections with which we come in contact, it seems to me that a résumé of the subject, together with the report of two cases occurring in San Francisco, might be of interest. The histories of the two cases are as follows:

Case No. 1. Well developed, well nourished Jamaican negro, age 34, service of Dr. Hyman at the City and County Hospital. Usual diseases of childhood, gonorrhea five times, syphilis ten years ago, treatment consisted of internal medication for about six months. Present lesion commenced as a nodule on the penis, about two years ago, and has practically amputated the same with the exception of one inch. The stump of the penis is now healed. No evidence of disease of the internal viscera can be ascertained, nor is there palpable glandular enlargement in either groin. The patient presents an ulcer on the pubes about two inches in length, slightly indurated, with somewhat elevated, papillomatous border, and flabby granulated base, and watery, foul secretion. (Fig. 1.) The scar on the inner side of the left thigh is apparently luetic in origin, presumably the result of a gummatous lesion, occurring four years ago, and healing under anti-luetic treatment. Wassermann reaction is negative. Thirty inunctions and K. I. were administered without benefit, as well as dressings with calomel.

Sections, examined by Dr. Dickson, show the picture of a chronic granulating process of the skin; no spirochatae present, but, in addition to the usual pus organisms, bacilli were found resembling b. malleus. Treatment: Dr. Hyman excised the lesion, which healed under simple sterile dressings.



Case No| 2. Cuban, age 26, cigarmaker, slight development, fairly well nourished. Gonorrhea once, three years ago, denies syphilis. Patient states that about three years ago he noticed a few dark spots in the groin, "which afterwards became like a boil." After being scratched, the lesion opened and discharged, and the ulcer so formed has spread by continuity until the present condition presents No evidence of disease of the internal viscera presents, no palpable enlargement of the glands of the groin, or palpable lymph strings. Wassermann negative.

The lesion consists of an ulceration in the right groin, about three inches in length, and varying from one-half to one inch in width, following the general direction of Poupart's ligament. It has a raised papillomatous border, a granular base, with portions presenting a papillary overgrowth, and occasional islets of epithelium, while the outer end of the ulcer is partially cicatrized. Thirty inunctions, K. I., calomel dressings, as well as com-

* Read before the Medical Section of the San Francisco County Medical Society, September 3, 1912.